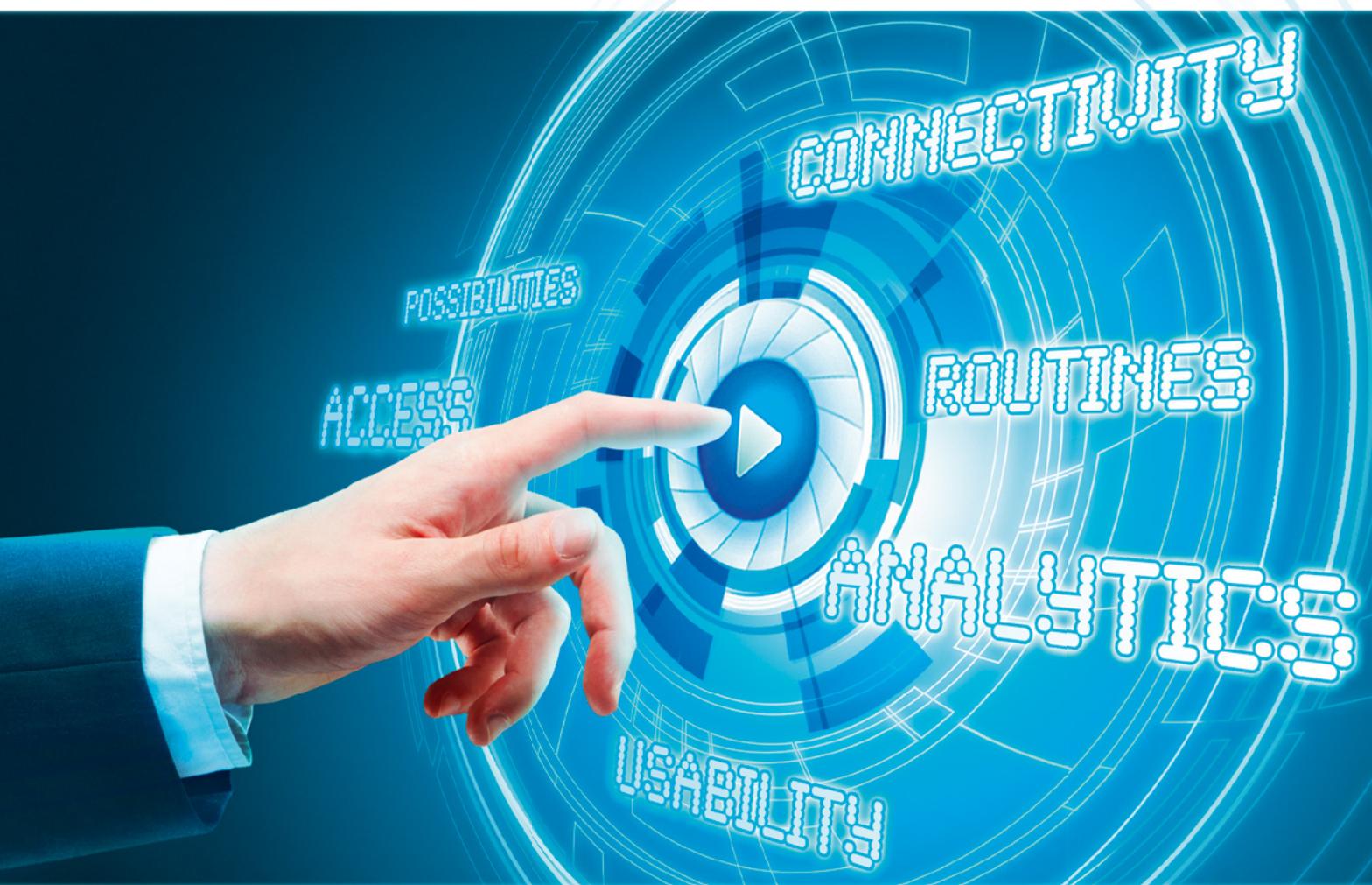


Perception Beyond the Limits of Senses

SeeTec Cayuga – Software for Video Management



SEETEC CAYUGA – NEXT GENERATION VIDEO MANAGEMENT SOFTWARE: KEY FEATURES AT A GLANCE.

Various Access Options:

- Native Client for Microsoft® Windows® environments
- Web Client
- Mobile Client for Android™ and iOS®
- Display Agent to control monitor walls

Optimized Usability for Efficient Working:

- Redesigned user interface with enhanced contrast ratio and larger fonts and icons
- Virtual cockpit for optimized user guidance
- Intuitive usability

Powerful Architecture for Multi-Site Installations:

- Automated distribution of updates and new software versions via Auto Updater
- Resource-saving transmission of video streams using multi streaming and bandwidth-optimized archive playback
- Multi Installation Login to access several independent systems with one client at the same time

Failover & Redundancy Concept:

- Failover recording if a recording server stops working
- System access even if the central administration server fails
- Support for Windows Cluster and virtualization

Privacy Protection & Data Security:

- Encrypted communication between server and client as well as between server and edge device (if supported)
- Multi-level administration and detailed user rights model
- Masking or blurring of sensitive zones
- Double password

Comprehensive Integrations & Interfaces:

- New, powerful video analytics module for building and perimeter security
- Analytics interface for linking up video analysis systems from third party suppliers
- OPC Interface
- Access control interface to interact with 3rd party access control solutions
- Smart drivers for a more flexible use of new cameras and devices independent of release cycles



INSPIRED SENSE:

SEETEC CAYUGA – SEE MORE,
UNDERSTAND MORE, PERFORM FASTER.

In 1999 SeeTec developed the world's first network-based video management software. SeeTec Cayuga is another demonstration of SeeTec's innovative creativity: Inspired by the experience from many thousands of projects, and as the market leader in the German-speaking world, we have developed the next generation of video management software.

Profit from limitless networking – for seamless integration of old and new systems. Discover simple, flexible administration – optimized specifically for your organizational structure. And look forward to the latest, intuitive operation – for user-friendly handling that meets every need.

With SeeTec Cayuga you experience video management in a whole new dimension. We call it: "inspired sense".





SEETEC CAYUGA:

THE HEART OF THE MULTI SOLUTION PLATFORM, UP FOR EVERY CHALLENGE.

SeeTec Cayuga is at the core of the SeeTec Multi Solution Platform. With this modular system concept, SeeTec Cayuga offers a range of application options extending far beyond the traditional security sector. Thanks to a variety of many different modules and interfaces that can be docked onto the SeeTec Cayuga core software, individual, scalable video management solutions are produced for every conceivable application and purpose – solutions that are as unique as a fingerprint.

Sector Specific Applications:

In combination with SeeTec BVI SeeTec Cayuga is also able to support and optimize business processes in the areas of logistics, wholesale and retail trading, transportation and finance. To achieve this, video data are linked to process and business related company data to generate new sector and customer specific insights. Software solutions from SeeTec include a range of different interfaces, such as to PoS, RFID or warehousing systems, as well as analysis tools such as object and people counting.

Image Analysis Modules:

SeeTec Cayuga has powerful modules for evaluating video data from different sources, including video analysis and license plate detection as well as object and people counting. These modules provide targeted support for the user in recognizing relevant events.

Interfaces for System Integration:

SeeTec Cayuga can be optimally integrated into the architecture of your security system. Third party systems such as PSIM systems (Physical Security Information Management), alarm centers and access control solutions can be linked up and controlled via a variety of interfaces.

Varied Access Routes:

SeeTec Cayuga can be accessed securely from anywhere – including via web & mobile clients. The Display Agent allows image data to be visualized on large screen systems.

The Multi Solution Platform Individual software solutions following a modular design pattern

The Multi Solution Platform can be extended as required and scaled without limit, thus offering maximum investment protection. This means it provides cost-effective solutions for the long term, too.



- SEETEC CAYUGA CORE SOFTWARE
- PROCESS INTEGRATION
- ANALYTICS
- INTERFACES
- ACCESS OPTIONS

SEETEC CAYUGA:

LIMITLESS NETWORKING FOR THE PERFECT INTERACTION OF ALL COMPONENTS.

Made-to-measure solutions can be implemented with the greatest possible level of networking. The high degree of openness and interoperability of SeeTec Cayuga permits existing and new systems to be linked in individually. SeeTec Cayuga can meet every possible requirement here. A variety of hardware and software components can be integrated via interfaces and protocols – this makes SeeTec Cayuga ideal as a solution for large and complex projects.

The outlay is low for new installations because SeeTec Cayuga can be quickly and easily integrated into your existing system environment. Connectivity also means that old systems can be retained and can continue to be used. All this ensures that SeeTec Cayuga delivers cost-effective and sustainable solutions.

Hardware Integration:

- SeeTec Cayuga is manufacturer-independent, meaning it supports a wide variety of camera models from many different manufacturers.
- Many additional camera models can also be integrated via the ONVIF standard.
- Analog cameras and systems are integrated via video encoders.
- Analog system components are connected via I/O modules.
- Smart Drivers allow an easy integration of new camera models.

Software Integration:

- Analysis applications (server or camera based) from other suppliers can be integrated flexibly via the SeeTec Analytics Interface.

System Integration:

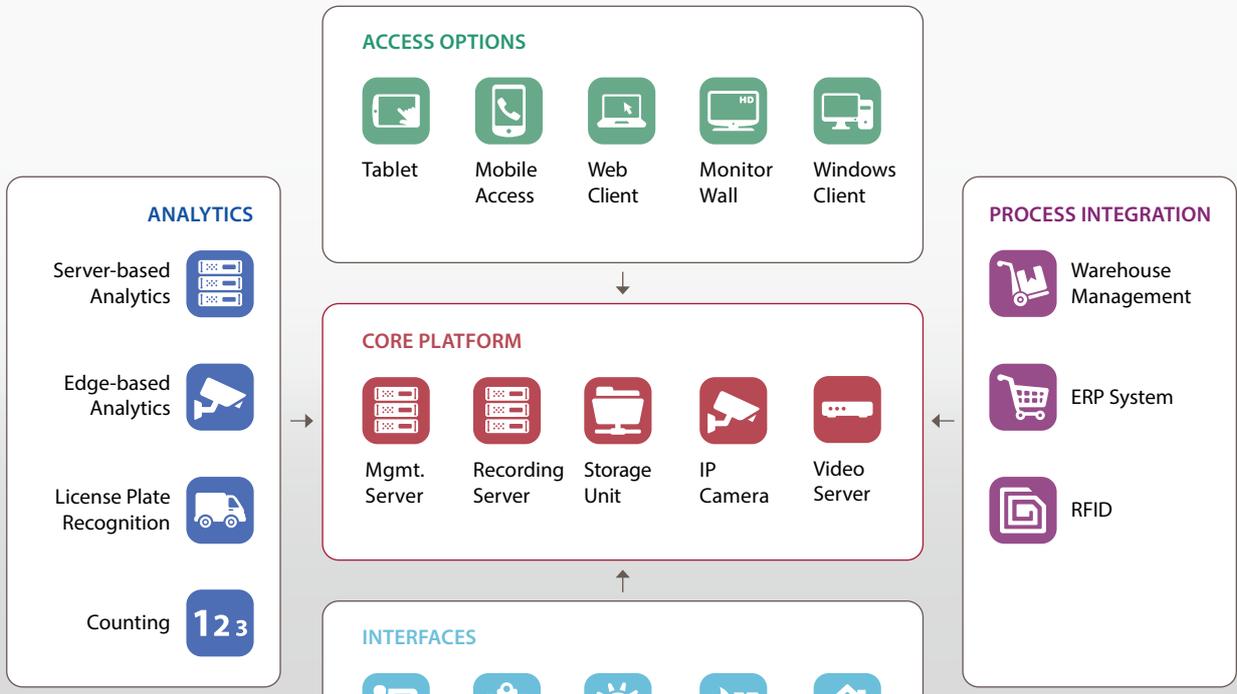
- Sector-specific solutions such as PoS and ERP systems are integrated quickly and easily via the Business Application Interface (driver-based concept).
- Security systems such as building management and PSIM systems, access control systems, intruder and fire alarm systems as well as alarm centers and control room solutions are integrated via interfaces.
- Other third party systems can be integrated via network I/Os and TCP triggers.
- VoIP-compatible devices are linked up via the integration of SIP servers.
- SeeTec Cayuga supports the leading cross-system standard in automation and security technology: OPC UA.
- SeeTec Cayuga can easily be connected to third party access control solutions using a pre-defined interface (driver-based concept).

**Naturally SeeTec Cayuga itself can also be integrated into third party systems.
A SDK (Software Development Kit) documented in detail is available for this purpose.**



Unlimited Integration

SeeTec Cayuga connects existing and new components



SeeTec Cayuga can integrate a variety of different systems via internet, interfaces and protocols.

SEETEC CAYUGA:

INTELLIGENT ANALYSIS SO THAT YOU CAN MAKE THE RIGHT DECISIONS.

The highly specialized evaluation and analysis tools in SeeTec Cayuga qualify the image data received and filter out all relevant information – either directly or in combination with existing business data. A custom compiled set of analysis tools is used to issue specific information that is important to you. Intelligent analysis routines allow you to record and evaluate results more quickly – and make the right decisions as a result.

Comprehensive Video Analysis:

SeeTec video analysis uses individually defined rules to automatically direct your attention to risks and hazards, achieving targeted alarm handling. It can differentiate reliably between different object types (persons, vehicles).

Fields of application: Perimeter security, monitoring of safety-critical areas such as stations, airports, prisons, power stations and companies, theft protection in wholesale and retail, and much more.

Supported Scenarios:

- Intrusion: An alarm will be triggered when one or several objects enter a zone.
- Loitering: If an object remains in one zone longer than for a defined period, an alarm will be triggered.
- Zone Crossing: An alarm will be triggered when an object crosses two zones in a certain order or in the wrong direction.
- Conditional: Only if several zones are crossed in a pre-defined order, an alarm will be triggered.

Other Analysis Functions:

- Server-based motion detection can be quickly and easily activated via the “record on motion” function
- Support for camera-based motion detection
- ISearch: Ex-post search function in archive recordings for faster tracking of events

Analytics Interface:

The range of functions in SeeTec Cayuga also allows you to use the SeeTec Analytics Interface (SAI) to integrate camera and server-based analysis functions from other manufacturers. This means: With SeeTec Cayuga you can utilize all the latest analysis functions for your company – for optimum video management.

Solutions from these manufacturers are currently supported:

- ACIC Activity Detection (camera & server-based)
- Axis Perimeter Defender (camera-based)
- Bosch IVA (camera-based)
- Canon (camera-based)
- CogVis arealvis, gatevis, objectvis (server-based)
- Digital Barriers SafeZone (camera & server-based)
- Flir FLUX (server-based)
- Securiton IPS Analytics Manager (camera & server-based)

License Plate Recognition:

The LPR module (License Plate Recognition) can automatically read license plate formats from numerous countries, including even formats with Cyrillic and Arabic fonts. It can cover multiple road lanes simultaneously.

Fields of application: Traffic monitoring, vehicle access control, barrier control, allocation of parking spaces and many more. The license plate detection function is also ideal for marketing purposes, e.g. to determine the geographic origin of customers.



Comprehensive Video Analysis Functions



ISEARCH

Intelligent archive research: By masking an object in the camera view you are able to understand within seconds what happened to it.



ALARM ZONES

Alarm zones are configured to protect secured areas. If these zones are entered or crossed, an alarm will be triggered.



COUNTING

Object and people counting generates a continuous flow of information to support decisions.



LPR

License plates are read out with complex algorithms. The acquired data can be automatically provided for further applications.

SEETEC CAYUGA:

INTUITIVE OPERATION SO YOU CAN FOCUS ON WHAT'S REALLY IMPORTANT.

SeeTec Cayuga combines maximum functionality and maximum user-friendliness. The user interface impresses with an exceptionally clear layout, which offers intuitive user guidance. SeeTec Cayuga exploits the benefits of modern operating concepts and combines them with ingenious functionality and optimum ergonomics – right down to a glare-free night mode.

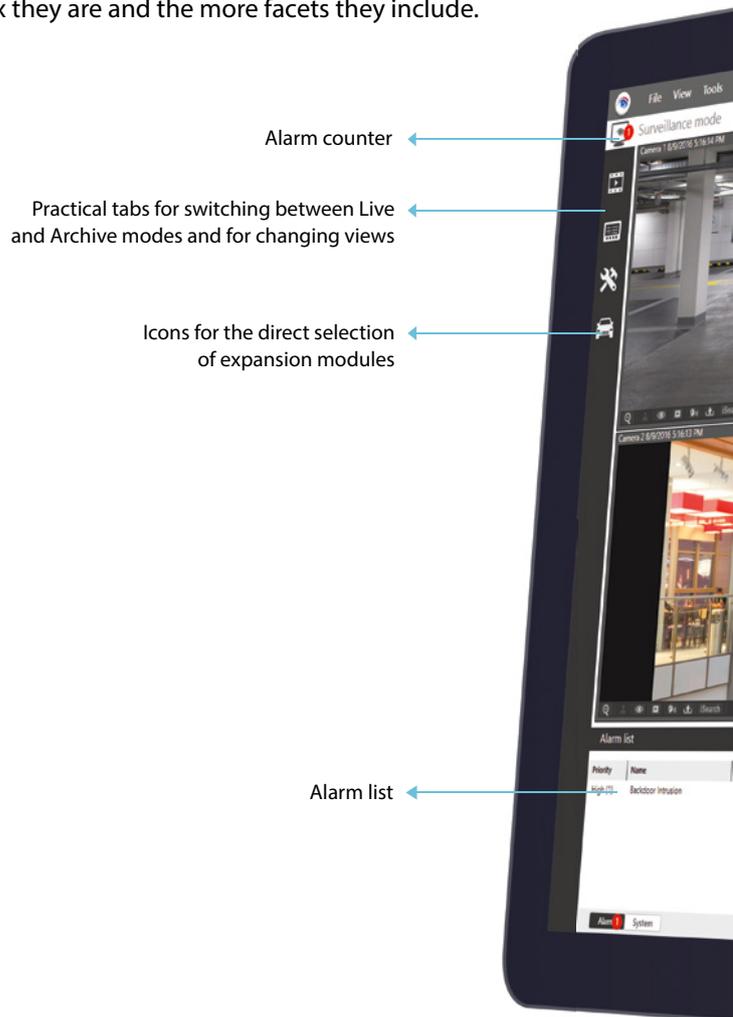
This gives you a clear overview at any time so that you can respond quickly – in Live, Archive and Configuration mode. SeeTec Cayuga is easy, fast and effective in operation, even with just a short familiarization phase – an advantage that becomes all the more important for company installations, the more complex they are and the more facets they include.

Time-Saving Functionalities:

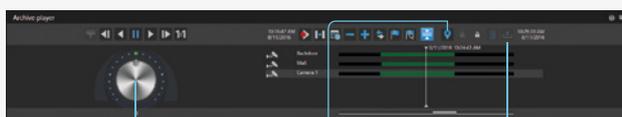
- Multi camera configuration for rapid setup and modification of camera functions
- Camera selection via lasso directly in the layout plan – for rapid interpretation of situations
- Positioning views by “drag & drop” onto video walls

Efficient Alarm Management:

- Alarm counter and toast messages – to have all current alarms on the radar even in archive mode
- Color definition – classifies alarms for improved clarity of layout
- Pre-defined 2 x 2 view with Pre-Alarm/Live/Archive/Trigger view – for improved understanding of events



Archive Player:



- Shuttle wheel for rapid navigation in archive mode
- Bookmarking makes it easier to find events in the archive
- Easy export of sequences in one step via selection pins (export procedures in the background are displayed via counters and progress bars)



SEETEC CAYUGA:

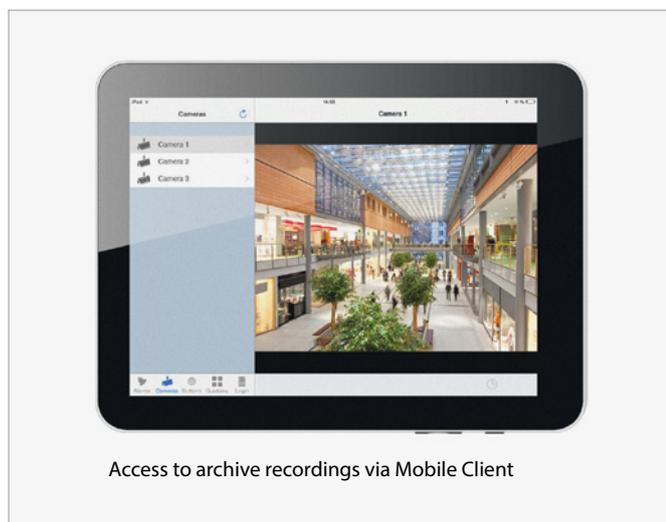
FLEXIBLE ACCESS OPTIONS
SO THAT YOU HAVE EVERYTHING
UNDER CONTROL AT ALL TIMES.



In a mobile world with global business relationships, video management is required to work properly regardless of location. SeeTec Cayuga offers practical and state-of-the-art access options and transmission solutions that allow you to keep an eye on your company from anywhere in the world. Naturally your data is secure at all times.

Web & Mobile Clients:

For rapid and flexible system access. No additional video plug-ins are required as all image streams are converted to a standardized format via the SeeTec Transcoding Service. Web & Mobile Clients are available for various mobile devices such as tablets and smartphones (iOS and Android).



SeeTec Anywhere:

Allows you to run SeeTec Cayuga on any computer with no prior software installation required. Depending on user rights, SeeTec Anywhere offers all the functions of the installed version, such as live and archive view, administration and system configuration.

Data Security:

In two different ways: selected screen areas are hidden via masking; moving objects are pixelated and thus anonymized via blurring. System access can also be secured via the four-eye principle (input of a second password).

Transcoding:

For optimal image transmission: By transcoding video streams, images can be optimized for the available network bandwidth by the server. For example, images are recorded in full HD and streamed to iPad via 3G in low resolution.

Display Agent/Virtual Matrix:

Integration of large screen systems and video walls from different manufacturers; the video walls can be controlled via a standard SeeTec client.

Encryption:

Data transmission between SeeTec modules as well as between server and client is carried out using 128-Bit encryption.

Multi-Installation Login:

Allows a user (e.g. in an alarm center) to connect to multiple installations simultaneously and to access all connected cameras.

Multi Streaming:

SeeTec Cayuga can transmit, save and display multiple camera streams with different parameters for different applications.



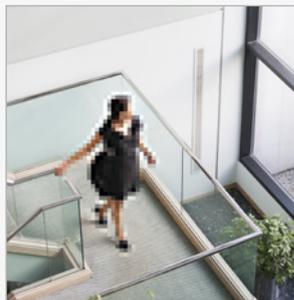
Privacy Protection

Masking out persons or image areas



PRIVACY MASKING

Sensitive image areas (e.g. break and recreation rooms, public areas) are masked by a freely definable area and hidden in the live and archive images, depending on rights.



MOTION SCRAMBLING

Moving objects or objects that differ from a reference image defined in advance are displayed pixelated in the live image and thus anonymized.

SEETEC CAYUGA:

FLEXIBLE CONFIGURATION OPTIONS FOR PERFECT CUSTOMIZATION FOR YOUR COMPANY.

SeeTec Cayuga is optimally customizable for the organizational structures of your company – up to any conceivable size. Thanks to the distributed installation of the software across multiple servers, any level of scaling is possible. This means that the servers can be positioned in different locations if required (e.g. stores).

All users of the software are included individually in line with their various rights. This means that even large systems distributed worldwide with several thousand cameras can be managed and controlled centrally using SeeTec Cayuga.

The overall system architecture physically separates the clients from the server. As saving image data and communication with the cameras are integrated as system services, it is not necessary to launch a separate program on the server and no local login is required. Very complex applications are possible using this structure.

User Management With Different Administrator Levels

SeeTec Cayuga permits the management of over a thousand users. Every user can be individually allocated detailed rights to cameras with control elements (e.g. PTZ control) and additional SeeTec Cayuga components such as buttons or layout plans. The rights matrix follows the organigram of your company.

Multi Configuration Tool

Simplifies and accelerates the setup of cameras and camera groups.

Wizards

Offer user-guidance dialogs to simplify the processes when creating new system elements, e.g. cameras and alarm scenarios.

Auto Updater

This means that your version of SeeTec Cayuga stays always up to date – even automatically with the SeeTec Software Maintenance Agreement.

Advanced Alarm Scenarios

SeeTec Cayuga means that you can define and specify any complex alarm scenarios as to how to respond to specific events in case of an alarm, or which third party systems are actuated.

Failover Concept

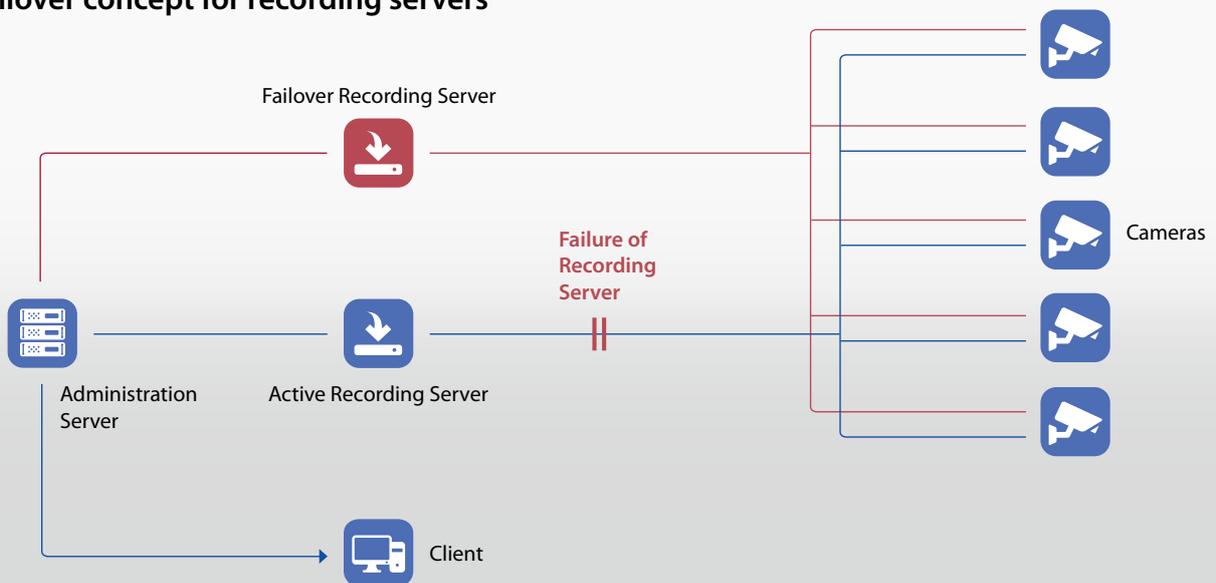
If a recording server fails, a hot-standby server automatically takes over and recording continues reliably. If the central administration server is unavailable, a proxy server comes into play and permits error-free operation of the system with the existing user rights (island operation). Windows Cluster and virtualization are supported.

User Rights Matrix

	All	Superadmin camera	Camera control	Device recording	Operating permission	Camera PTZ	Camera presets	Camera preset configuration	Alarm control (Camera)	Primary alarm (PTZ)	MPEG playback	User map	User view	User view enable	User view restriction	User alarm enable group	Change location alarm group
Company	<input type="checkbox"/>																
Branch Office Lawrence	<input type="checkbox"/>																
Backdoor Entrance	<input checked="" type="checkbox"/>																
1st. Floor	<input checked="" type="checkbox"/>																
Perimeter	<input type="checkbox"/>																
Branch Office San Luis Obispo	<input checked="" type="checkbox"/>																
Parking Lot	<input checked="" type="checkbox"/>																
Office 52nd Street	<input checked="" type="checkbox"/>																
Branch Office New Orleans	<input type="checkbox"/>																
Lobby	<input type="checkbox"/>																
Loading Dock	<input checked="" type="checkbox"/>																
Branch Office Austin	<input type="checkbox"/>																
West Wing	<input type="checkbox"/>																
Main Entrance	<input checked="" type="checkbox"/>																



Failover concept for recording servers



You can count on that: With a consistent failover concept SeeTec Cayuga guarantees maximum operational reliability.

TECHNICAL INFORMATION:

LICENSE MODEL AND RANGE OF SERVICES.

SeeTec Cayuga is available in license packages for three sizes – up to 50, up to 100 and for an unlimited number of cameras. In addition to the basic packages there are option packages with an extended range of functions. All details are given on the right in the adjacent table.

Languages:

SeeTec Cayuga is available in 13 languages: English, German, French, Danish, Swedish, Norwegian, Russian, Turkish, Dutch, Spanish, Czech, Italian and Polish.

Manufacturer-Independence:

There is a wide variety of camera models available on the market from a large number of camera manufacturers – each with advantages and disadvantages that need to be weighed up carefully in the project planning phase. SeeTec therefore pursues a manufacturer-independent design concept: With SeeTec Cayuga you can operate network cameras and video servers from all well-known manufacturers as well as numerous I/O and SIP modules, alarm triggers and video sensors. Standard server systems from all leading manufacturers can also be used as SeeTec Cayuga server hardware. The free selection of IT and camera hardware makes it easy to achieve the optimal price/performance ratio.

Free Download:

Try out SeeTec Cayuga free of charge, with no strings!

At www.seetec-video.com you can request a fully functional 30-day test version for download.

Network cameras, encoders and hardware I/O		
2N Telecommunications	Dahua	Panasonic
ABUS	Dallmeier	PCS Convision
ACTi	Etrovision	Pelco
Acutvista	Flir	Riva
Advantech ADAM	Ganz	Samsung
American Dynamics	Geovision	Santec
Allnet	Grundig	Sanyo
Aper	Hikvision	Schneider Intercom
Arecont Vision	Honeywell	Sentry360
ARH	iDS	Siemens
Avigilon	IndigoVision	Siqura
Axis	Interlogix	Sony
Basler	IQinVision	Sunell
Baudisch	IQLE	UDP
Behnke	JVC	Vanderbilt
Bosch	LG	Videotek
Brickcom	Lilin	Videra
Canon	LTV	Vista
Commend	Lumenera	Vivotek
Convision	Mobotix	Wago
Cyberdata	Northern	W Box
D-Link	Oncam	



THE SEETEC CAYUGA PRODUCT PACKAGES:

VARIABLE AND SCALEABLE.

Product Packages	S50 X	S100	Infinity	Infinity X
Live & Archive View	✓	✓	✓	✓
Alarm Recording	✓	✓	✓	✓
PTZ Control	✓	✓	✓	✓
Maximum No. of Camera Channels	50	100	unlimited	unlimited
Maximum No. of Concurrent Users	5	10	unlimited	unlimited
Maximum No. of Recording Servers	1	2	unlimited	unlimited
Centralized Management	×	✓	✓	✓
Maximum Number of I/O Devices	5	10	unlimited	unlimited
Web & Mobile Client	✓	✓	✓	✓
Anywhere (Viewer, Client)	✓	✓	✓	✓
Redundant System Administration	×	✓	✓	✓
Failover Recording	×	×	×	✓
Multilevel Administration	×	×	✓	✓
BVI (optional)	×	✓	✓	✓
Display Agent	×	✓	✓	✓
SDK	×	✓	✓	✓
Multimedia Application Gateway	×	✓	✓	✓
Active Directory Support	×	×	✓	✓
Maps/Floor Plans	✓	✓	✓	✓
Sequential Alarm Window	×	×	✓	✓
Extended Alarm Scenarios	×	✓	✓	✓
Encrypted Transmission	✓	✓	✓	✓
Bandw. Optimized Archive Playback	✓	✓	✓	✓
Motion Scrambling	×	✓	✓	✓
Multi Installation Login	×	✓	✓	✓
VoIP Support	×	×	✓	✓
Edge Storage Support	×	✓	✓	✓
Server Based Motion Detection	✓	✓	✓	✓
Camera Sabotage Detection	×	×	✓	✓
Analytics Server (optional)	×	✓	✓	✓
Analytics Interface (optional)	×	✓ ¹	✓ ¹	✓ ¹
LPR (optional)	×	✓	✓	✓
Access Control Integration (optional)	×	✓ ¹	✓ ¹	✓ ¹
Intrusion Detection Integration	✓ ¹	✓ ¹	✓ ¹	✓ ¹
Intercom Integration	×	✓ ¹	✓ ¹	✓ ¹
Monitor Wall Integration	×	×	×	✓ ¹
OPC Integration (Server)	×	✓	✓	✓

¹ A list of supported solutions/devices will be provided by SeeTec on request.